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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,512	08/01/2001	Thierry Julia	06652.0462	4625

7590 11/13/2003

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EXAMINER

BARBEE, MANUEL L

ART UNIT PAPER NUMBER

2857

DATE MAILED: 11/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,512

Applicant(s)

JULIA ET AL.

Examiner

Manuel L. Barbee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,12-33 and 65-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,12-33 and 65-67 is/are rejected.
- 7) ☒ Claim(s) 68-70 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 67 is objected to because of the following informalities: In claim 67, line 2 of the claim, delete "context", and insert "--content--". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 12, 13, 19 and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Alfonso et al. (W0 01/15548) in view of Parsonnet et al. (US Patent Application Publication 2002/0138546).

With regard to comparing a received infrared reflectance spectrum (NIRS) to a database calibration that correlates known content levels of a component in a material to a known NIRS and predicting the content level of the component, as shown in claim 1, D'Alfonso teach comparing the NIRS of a material to a known calibration in a database to determine the content level of different components in materials (page 2, lines 1-10; page 4, line 31 - page 5, line 28). D'Alfonso et al. do not teach electronically receiving a request from a customer to predict the level of one component in a material and electronically reporting the prediction, as shown in claim 1.

Parsonnet et al. teach allowing customers to generate service requests and sending documents or files in response to the request to the customer (Abstract; par. 2,

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par. 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material component measuring method, as taught by D'Alfonso et al., to include allowing a customer to generate a request and electronically reporting the result of the request, as taught by Parsonnet et al., because then customers would have had access to results of NIRS test in a more efficient and less costly manner than sending samples to be tested (Parsonnet et al., par. 2).

D'Alfonso et al. do not teach charging a fee, as shown in claim 19. Parsonnet et al. teach charging a fee for services rendered to a customer (Abstract; par. 56, par. 72). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material component measuring method, as taught by D'Alfonso et al., to include charging a customer a fee for the service, as taught by Parsonnet et al., because then it would have been profitable to provide the service.

D'Alfonso et al. do not teach exchanging the request and the report on a Web site, as shown in claim 13. Parsonnet et al. teach exchanging the request and the reports on the Internet (par. 2, par. 8, par. 62, Fig. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material component measuring method, as taught by D'Alfonso et al., to include allowing a customer to generate a request and electronically reporting the result of the request on the Internet, as taught by Parsonnet et al., because then customers would have had access to results of NIRS test in a more efficient and less costly manner than sending samples to be tested (Parsonnet et al., par. 2).

With regard to the feedstuff being animal byproduct, as shown in claims 6, D'Alfonso et al. teach that the material is animal byproduct a component of animal feed (page 5, lines 7-22). With regard to determining the component level of methionine or lysine, as shown in claim 12, D'Alfonso et al. teach determining the component level of methionine and lysine (page 4, line 31 - page 5, line 6).

D'Alfonso et al. do not teach reporting the prediction within 10 minutes of receiving the request or that the prediction report is and request may be exchanged 24 hours a day, as shown in claims 25-27. Parsonnet et al. teach a system that allows customer requests and reports to be sent using the Internet (Fig. 2). The Examiner takes official notice that it is well known to arrange a database search to finish within 10 minutes and to have web servers that are accessible 24 hours a day. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material component measuring method, as taught by D'Alfonso et al., to include a web server that is accessible 24 hours a day and that connects to a database that returns results within 10 minutes, because then the report would have been provided more efficiently and cheaply (Parsonnet et al., par. 2).

D'Alfonso et al. do not teach opening a customer account for a customer upon receipt of a request and providing the customer with identity and/or security codes, as shown in claims 28-30. Parsonnet et al. teach accepting customer requests and creating customer records using customer ID's and passwords to identify customers (par. 77-78). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material component measuring method, as taught by

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D'Alfonso et al., to include customer records with customer ID's and passwords, as taught by Parsonnet et al., because then the system would have facilitated providing service to a large number of customers.

D'Alfonso et al. do not teach storing customer request, fee information and prediction report so that the information may be retrieved by the customer on a Web site, as shown in claims 31-33. Parsonnet et al. teach Internet access to services and database storage (Fig. 2, par. 99-100). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material measuring method, as taught by D'Alfonso et al., to include storage accessible from the Internet, because then information would have been accessible to the customer at the customer's convenience.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Alfonso in view of Parsonnet et al. as applied to claim 1 above, and further in view of Jacot et al. (US Patent No. 5,219,400).

D'Alfonso et al and Parsonnet et al. teach all the limitations of claim 1 upon which claim 2 depends. Neither D'Alfonso et al. nor Parsonnet et al. teach that the calibration includes a correlation between a known component determined by in vivo measurement and a NIRS, as shown in claim 2. Jacot et al teach using a correlation between an in vitro and an in vivo measurement as a reference in a measurement made with near infrared light (col. 2, lines 34-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material measuring method, as taught by D'Alfonso et al. and Parsonnet et al., to include a correlation between in vitro

and in vivo measurements, because then the measurements would have been more accurate.

5. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Alfonso et al. in view of Parsonnet et al. as applied to claim 1 above, and further in view of Cupps et al. (US Patent No. 5,991,739).

D'Alfonso et al. and Parsonnet et al. teach all the limitations of claim 1 upon which claims 14-18 depend. D'Alfonso et al. and Parsonnet et al. do not teach exchanging the customer request and report using electronic mail, as shown in claim 14, or presenting menu options for selection by the customer in making a request as shown in claims 15-18. Cupps et al. teach accepting customer orders using email (Abstract, col. 11, line 65 - col. 12, line 10). Cupps et al. teach allowing access to menu files to a customer for selection of order options (col. 4, lines 22-25; col. 8, line 43 - col. 9, line 33). If the ordering system taught by Cupps et al. is used with other services as suggested by Cupps, the options would be changed accordingly (col. 11, line 65 - col. 12, line 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material measuring method, as taught by D'Alfonso et al. and Parsonnet et al., to include accepting orders using email and menus containing request options, as taught by Cupps et al., because then a customer would have been able to efficiently make orders and choose from available options.

6. Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Alfonso et al. in view of Parsonnet et al. as applied to claims 1, 41, 51 and 60 above, and further in view of Tsumura (US Patent No. 5,729,740).

D'Alfonso et al and Parsonnet et al. teach all the limitations of claim 1 upon which claims 20-24 depend. D'Alfonso et al. and Parsonnet et al. do not teach a fee agreement based upon submitting a certain number of requests within a certain period of time, as shown in claim 20, or charging a quarterly fee based on an expected number of requests within each quarter, as shown in claim 21, or charging an additional fee for any number of requests greater than expected, as shown in claim 22, or not counting a request if a prediction error exceeds a threshold, as shown in claim 23, or discounting fees for a certain number of minimum requests, as shown in claim 24.

Tsumura teaches setting fees based on the frequency of requests or the number of requests received within a period of time for information (col. 2, line 22 - col. 3, line 45). The Examiner takes official notice that it is well known to prepay for a certain quantity of services such as for a number of minutes of cell phone usage and to charge extra for any service above the expected quantity of services. The Examiner further takes official notice that it is well known to charge less for a service that has a lower level of quality. The Examiner further takes official notice that it is well known to discount fees for wholesale or a minimum quantity of a service or product. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material measuring method, as taught by D'Alfonso et al and Parsonnet et al., to include billing for service as taught by Tsumura, and allowing prepaying and discounts for certain quantities of service and discounts for lower quality products, because then billing would have been flexible and customer-friendly (Tsumura, col. 1, line 16 - col. 2, line 19).

7. Claims 65 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Alfonso et al. in view of Parsonnet et al. as applied to claim 1 above, and further in view of Ozanich (US Patent No. 6,512,577).

D'Alfonso et al. and Parsonnet et al. teach all the limitations of claim 1 upon which claims 65 and 66 depend. D'Alfonso et al. and Parsonnet et al. do not teach providing a central database with calibrations based on samples from geographically diverse regions or calibrations based on materials produced in different seasons of the year, as shown in claims 65 and 66. Ozanich teaches that the characteristics of fruit within the near infrared spectrum vary depending on geography and season and Ozanich teaches having different calibrations based on geography and other calibrations (col. 2, lines 55-65; col. 5, line 60 - col. 6, line 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material measuring method, as taught by D'Alfonso et al. and Parsonnet et al. to include calibrations based on geography and season, as taught by Ozanich, because then the calibration would have been accurate for the conditions of the samples being measured (Ozanich, col. 2, lines 55-65).

8. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Alfonso et al. and Parsonnet et al. as applied to claim 1 above, and further in view of Zhang et al. (US Patent No. 5,832,182).

D'Alfonso et al. and Parsonnet et al. teach all the limitations of claim 1 upon which claim 67 depends. D'Alfonso et al. and Parsonnet et al. do not teach determining that an outlier exists when the prediction of the content level has a degree of error that

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exceeds a predetermined threshold value, as shown in claim 67. Zhang et al. teach identifying outliers in a very large database when a leaf in an old tree has far fewer data points than an average leaf in a new tree (col. 6, line 50 - col. 7, line 20; col. 17, line 30 - col. 18, line 7). "Far fewer points" suggests a threshold. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material measuring method, as taught by D'Alfonso et al. and Parsonnet et al., because then memory would have been saved by only using memory to save true outliers (Zhang et al., col. 17, lines 31-51).

Allowable Subject Matter

9. Claims 68-70 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed 14 October 2003 have been fully considered but they are not persuasive. Applicant states that one skilled in the art would not have been motivated to combine the teachings of D'Alfonso and Parsonnet. Applicant states that D'Alfonso appears to express satisfaction with what is already disclosed and that Parsonnet lacks any suggestion to use its disclosed systems in conjunction with NIRS techniques. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material component measuring method, as taught by D'Alfonso et al., to include allowing a customer to generate a request and electronically reporting the result of the request, as taught by Parsonnet et al., because then

customers would have had access to results of NIRS test in a more efficient and less costly manner than sending samples to be tested (Parsonnet et al., par. 2). While Parsonnet et al. does not specifically mention NIRS techniques, Parsonnet et al. is directed to collaborative work and remote services where the services can be delivered electronically (par. 2). D'Alfonso et al. teach comparing the NIRS of a material to a known calibration in a database to determine the content level of different components in materials (page 2, lines 1-10; page 4, line 31 - page 5, line 28). The NIRS of a material and an analysis of the NIRS could certainly be delivered electronically and as a remote service. And while D'Alfonso et al. may not have anticipated such an improvement, Parsonnet et al. does suggest providing goods and services more efficiently and cheaply which would have been an improvement for the stand-alone component measuring method in D'Alfonso et al.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bliton et al. (US Patent No. 6,496,309) teach identifying outliers in a CCD-Based imaging system.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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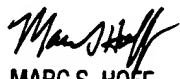
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel L. Barbee whose telephone number is 703-308-0979. The examiner can normally be reached on Monday-Friday from 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0976.

mlb
November 6, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
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